

LA SIERRA STORM CHANNEL

STAGE "B"

CONSTRUCTION DRAWINGS

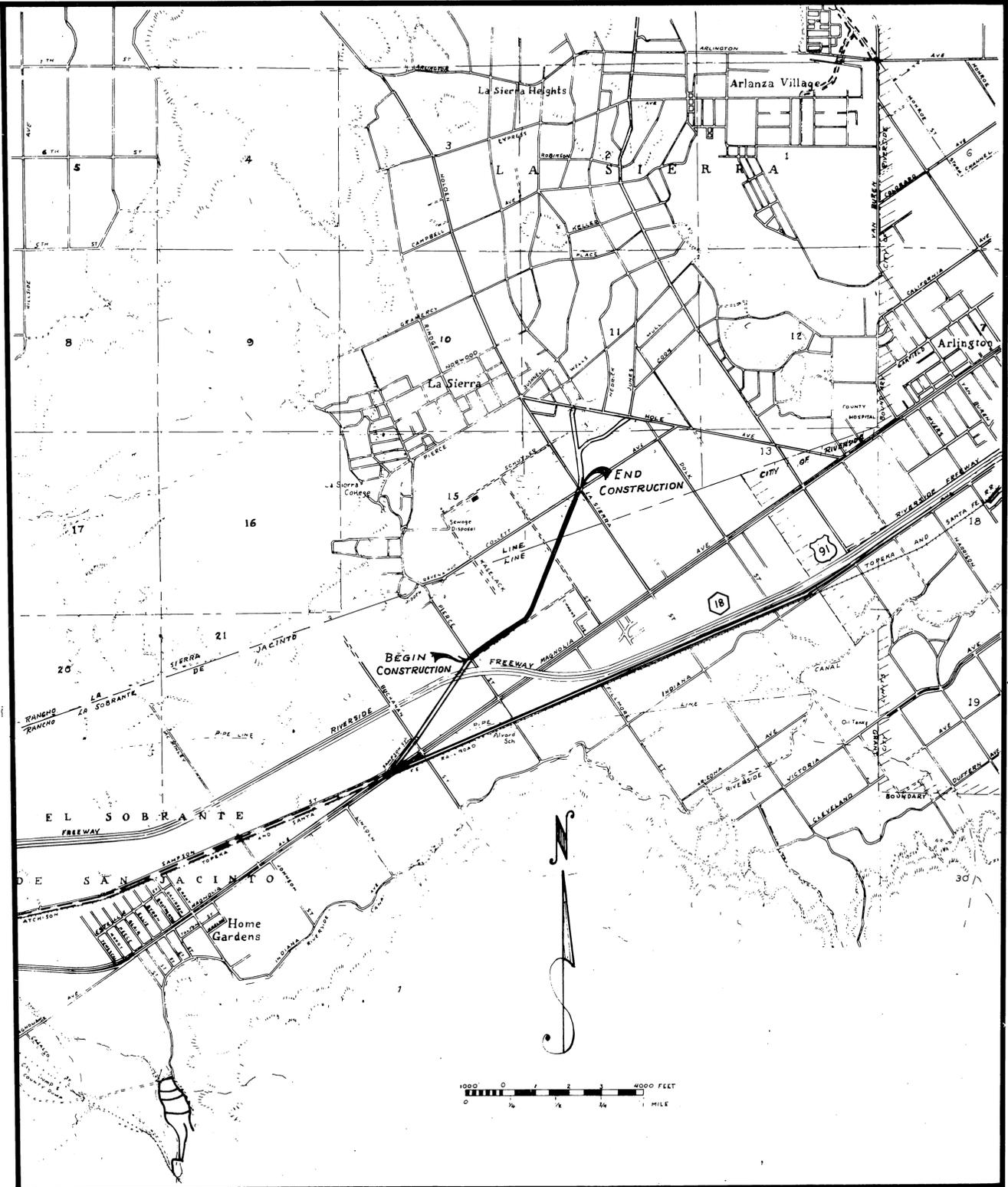
BY

RIVERSIDE COUNTY FLOOD CONTROL
AND

WATER CONSERVATION DISTRICT

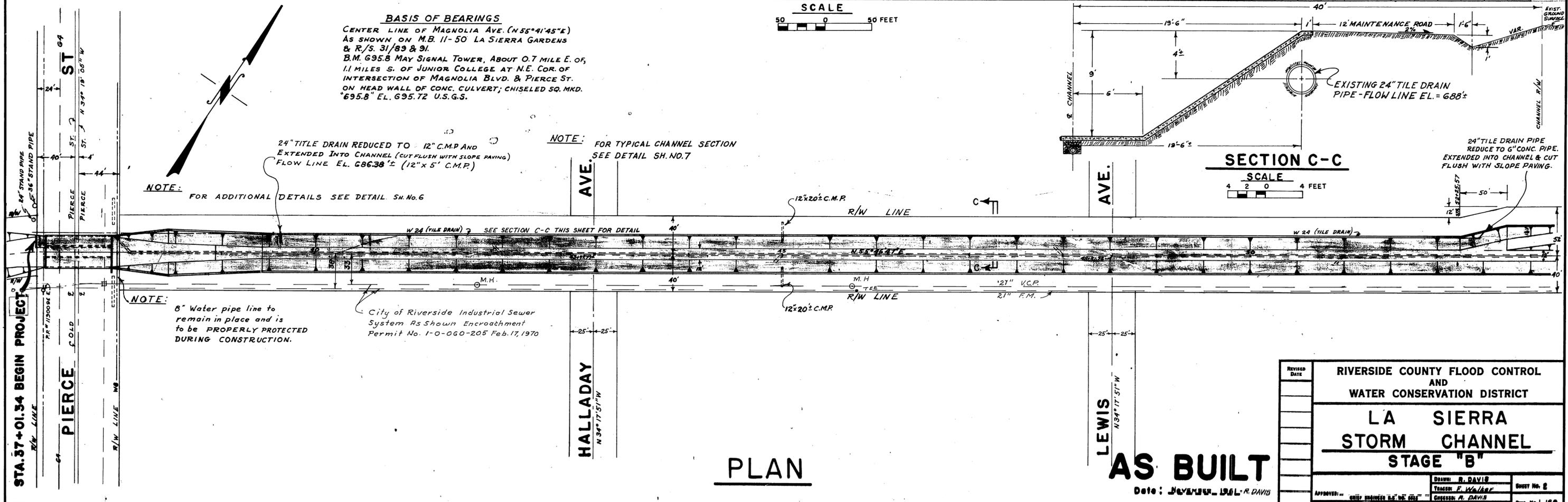
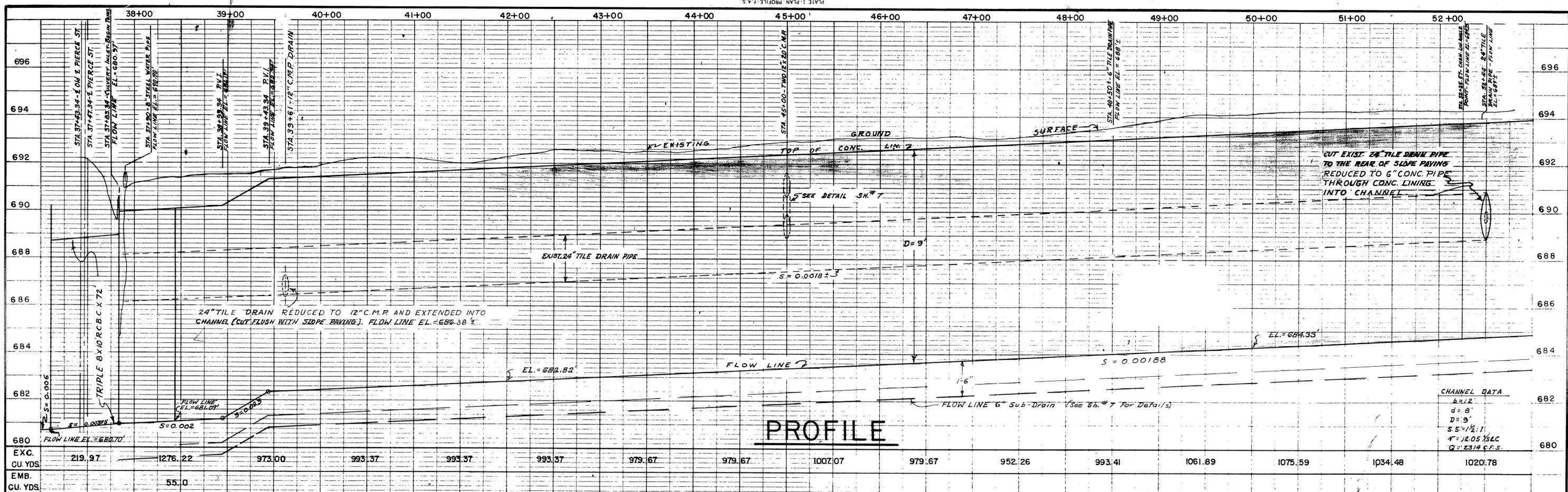
GENERAL NOTES

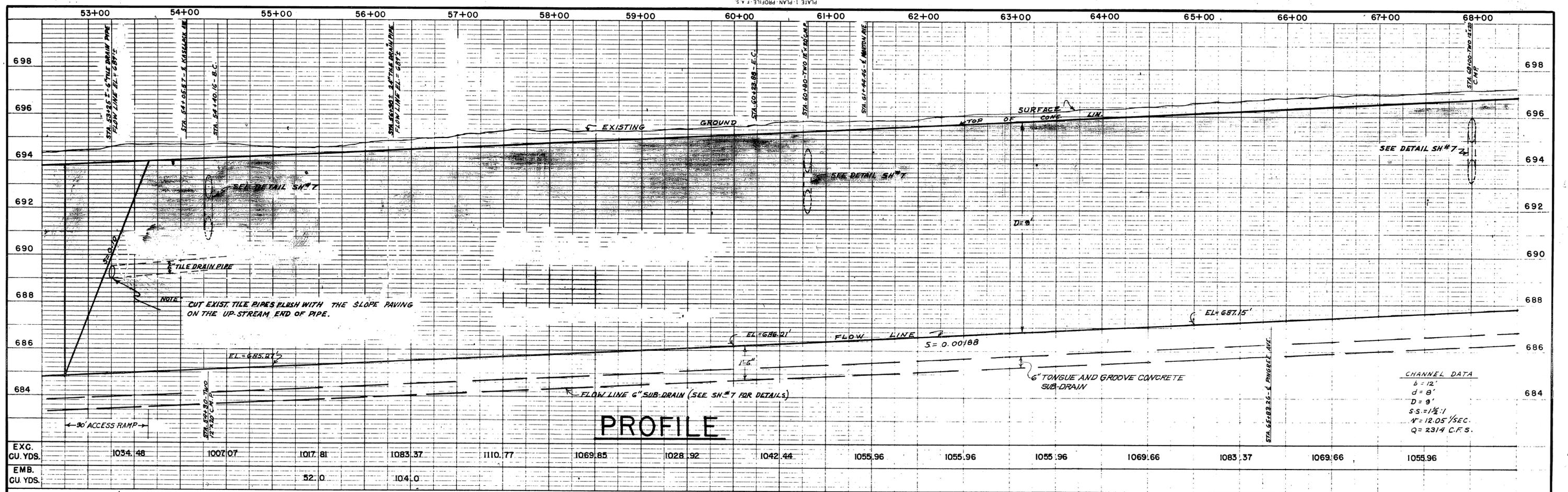
1. Reinforced concrete shall be Class A (6 sack) and shall have a minimum of 3,000 p.s.i. 28 day compressive strength.
2. Reinforcing steel shall be deformed, intermediate grade, billet-steel bars conforming to the specifications of A.S.T.M. Designation A-15, latest revised, with deformations conforming to A.S.T.M. Designation A-305.
3. All reinforcing bar bends and hooks shall conform to the American Concrete Institute "MANUAL of STANDARD PRACTICE."
4. Lap all reinforcing steel a minimum of 30 bar diameters at splices. The location of all splices shall be subject to approval of the Engineer.
5. All reinforcing steel shall have a minimum cover of 1 1/2" unless otherwise noted.
6. All exposed edges of concrete structures shall be chamfered 3/4" or rounded as directed.
7. Unreinforced concrete channel lining shall be Class B (5 sack), unless otherwise specified.
8. All concrete thickness dimensions are the minimum allowable.
9. Transverse grooves 1" deep at 10' spacing shall be provided in all unreinforced concrete channel lining. Grooves may be tooled or formed using 3/8" x 1" masonite strips.
10. All transverse construction joints in unreinforced concrete channel lining required at the end of a day's placing operation shall be located between the transverse grooves and No. 4 x 30" dowels at 24" spacing embedded 15" shall be provided.
11. Place 1 1/2" dia. weep holes 6" above invert on 10' % slope. Gravel pockets of approximately one cu. ft. shall be placed behind each weep hole.
12. Approved pit run gravel (1" maximum) shall be used for subdrain and weephole filter material where required on the plans.
13. The surface finish required for unreinforced concrete channel lining shall be a tight wood float finish.
14. All embankments shall be compacted to not less than 90% maximum density as determined by tests made conforming to the requirements of A.A.S.H.O. Designation T99-57, "The Compaction and Density of Soils."



PROJECT NO. 1-0-060

REVISED DATE	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
	LA SIERRA STORM CHANNEL STAGE "B"	
	COVER SHEET	
APPROVED	DRAWN: Ken Biggou	SHEET No. 1
DATE: 5/1/61	CHECKED: R. DAVIS	Dwg No. 1-160

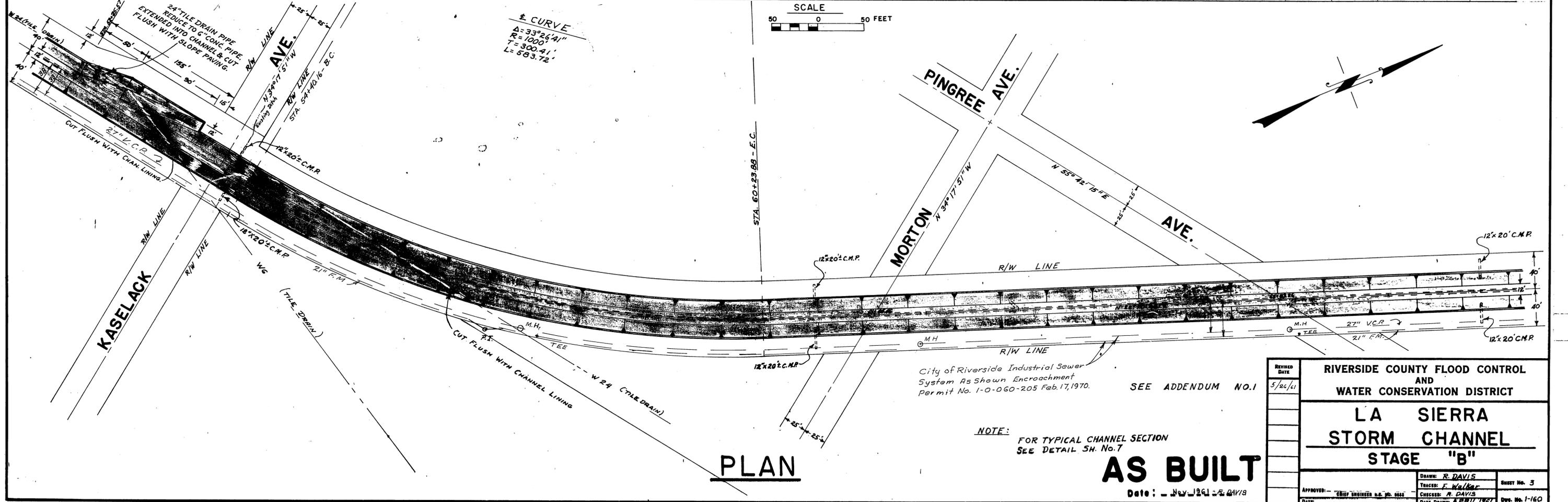




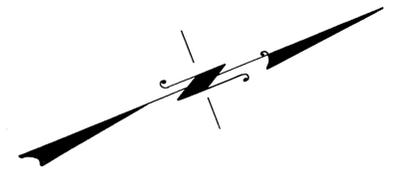
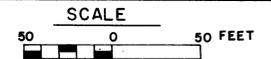
PROFILE

EXC. CU. YDS.	1034.48	1007.07	1017.81	1083.37	1110.77	1069.85	1028.92	1042.44	1055.96	1055.96	1055.96	1069.66	1083.37	1069.66	1055.96
EMB. CU. YDS.			52.0	104.0											

CHANNEL DATA
 b = 12'
 d = 8'
 D = 9'
 S.S. = 1/2" : 1'
 V = 12.05 / SEC.
 Q = 2314 C.F.S.



PLAN



± CURVE
 Δ = 33°26'41"
 R = 1000'
 T = 300.41'
 L = 583.72'

City of Riverside Industrial Sewer System As Shown Encroachment Permit No. 1-0-060-205 Feb. 17, 1970. SEE ADDENDUM NO. 1

NOTE: FOR TYPICAL CHANNEL SECTION SEE DETAIL SH. NO. 7

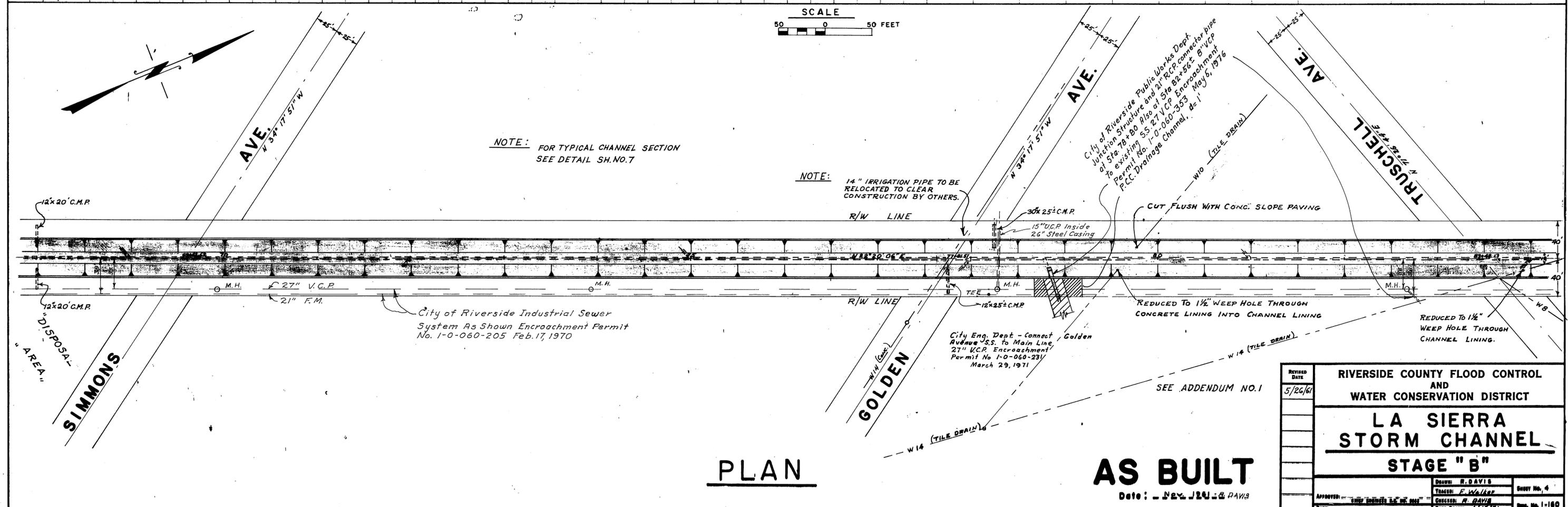
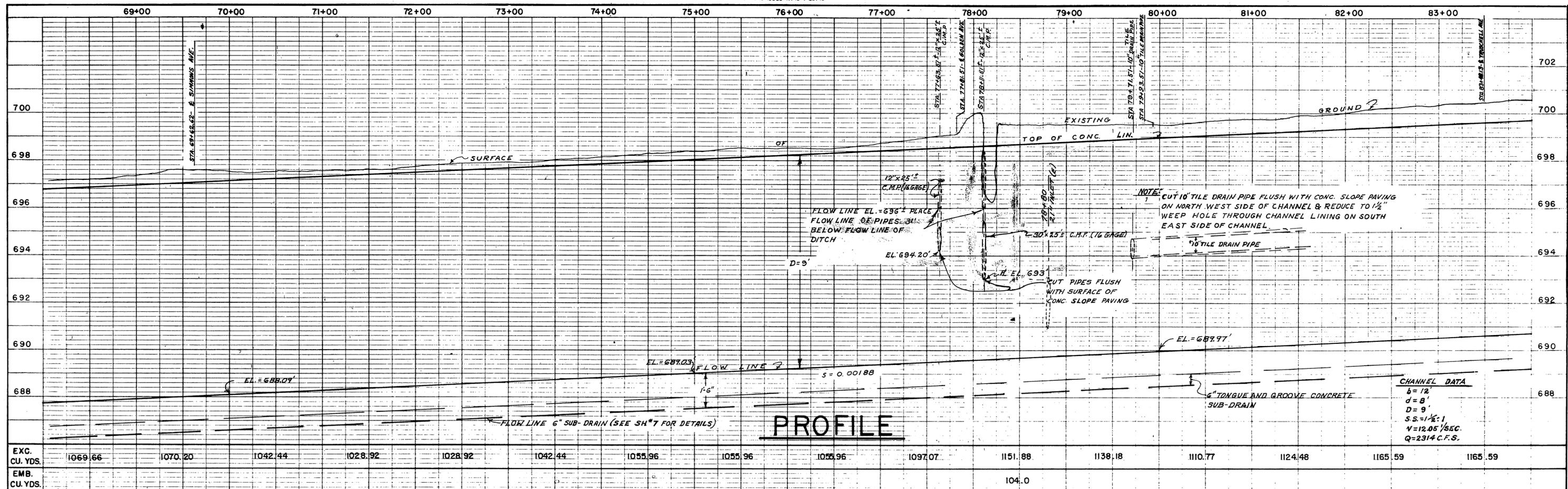
AS BUILT

Date: - Nov 26 1970

PROJECT NO. 1-0-060

REVISED DATE	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
5/26/61	LA SIERRA STORM CHANNEL STAGE "B"		
APPROVED: CHIEF ENGINEER R.E. JO. 082	DRAWN: R. DAVIS	CHECKED: F. WALKER	SHEET NO. 3
DATE: APRIL 1971	DRAWN: R. DAVIS	CHECKED: F. WALKER	DWG. NO. 1-160

D-173 B



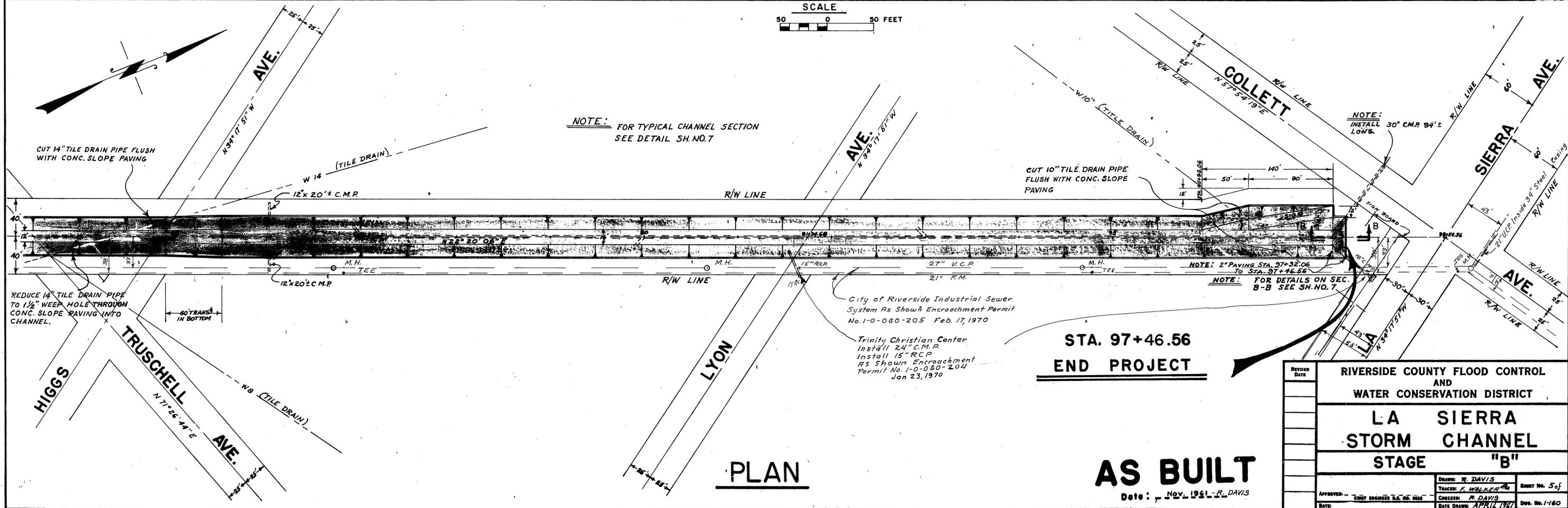
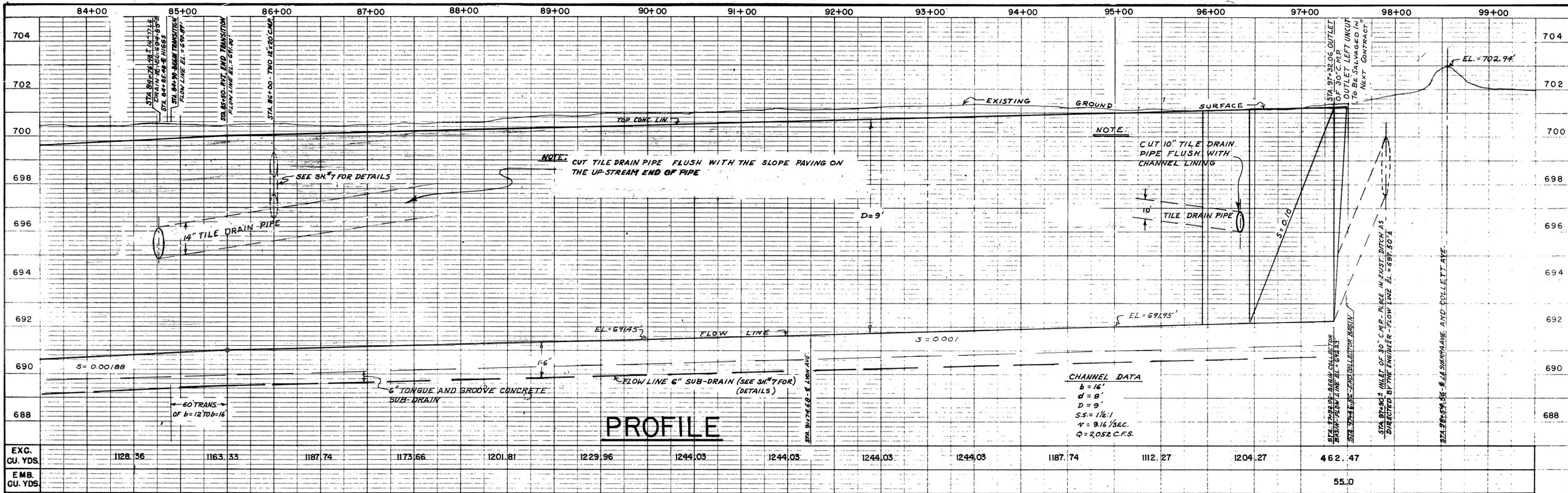
REVISED DATE	5/26/61	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
LA SIERRA STORM CHANNEL			
STAGE "B"			
APPROVED:	DATE:	DRAWN: R. DAVIS	SHRIT No. 4
CHECKED: F. WALKER		TRACED: F. WALKER	
		CHECKED: R. DAVIS	Dist. No. 1-160
		DATE DRAWN: 4/17/61	

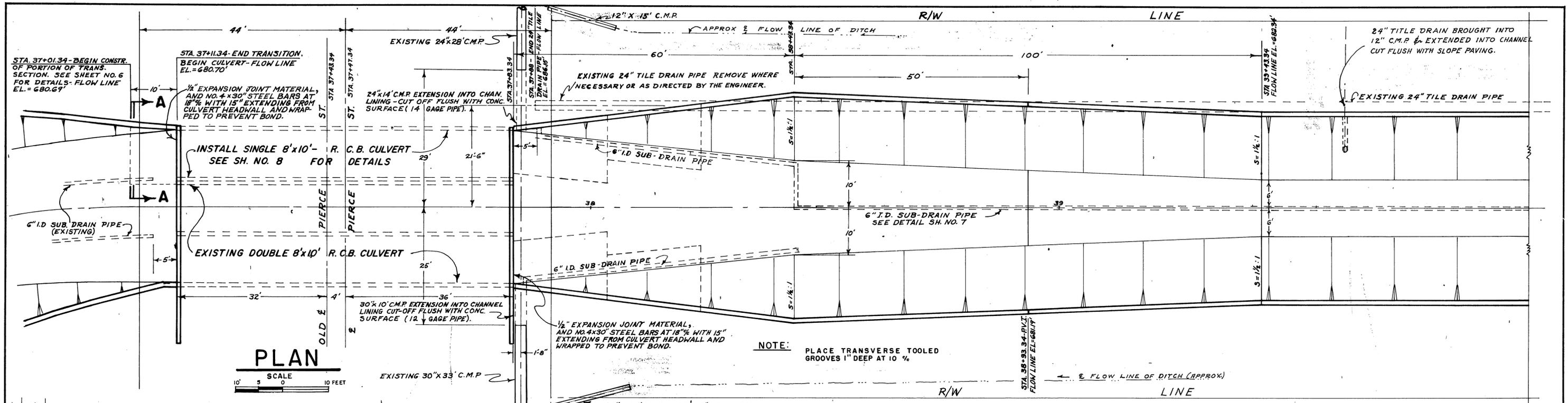
AS BUILT

Date: - Nov. 24 - 61 R.D.A.V.S.

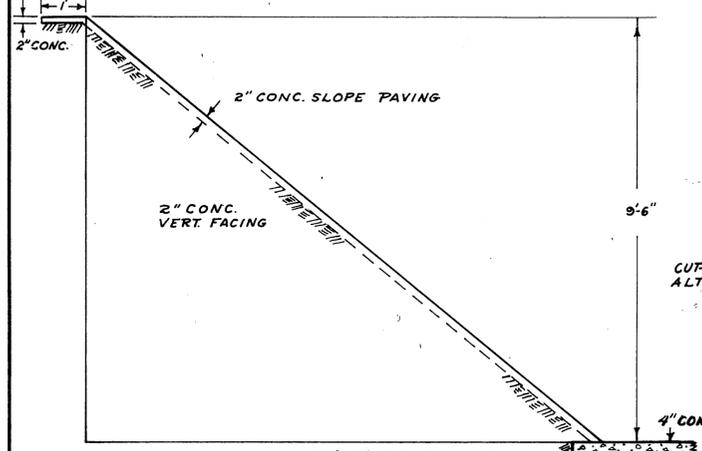
PROJECT NO. 1-0-060

D-173 B

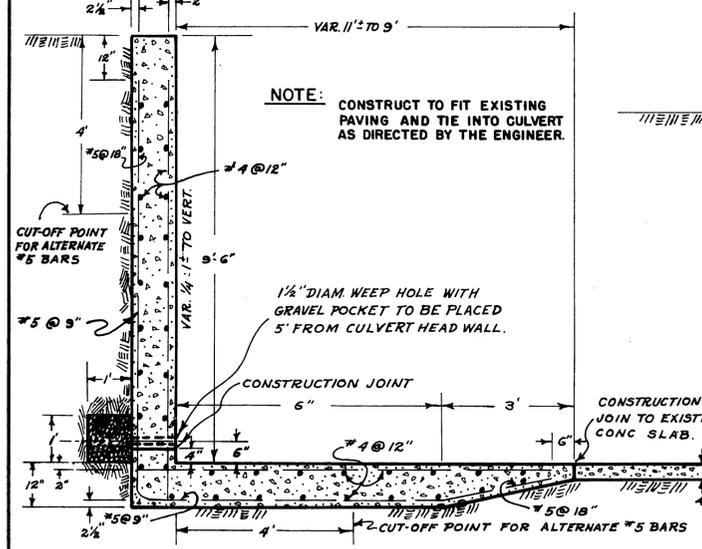




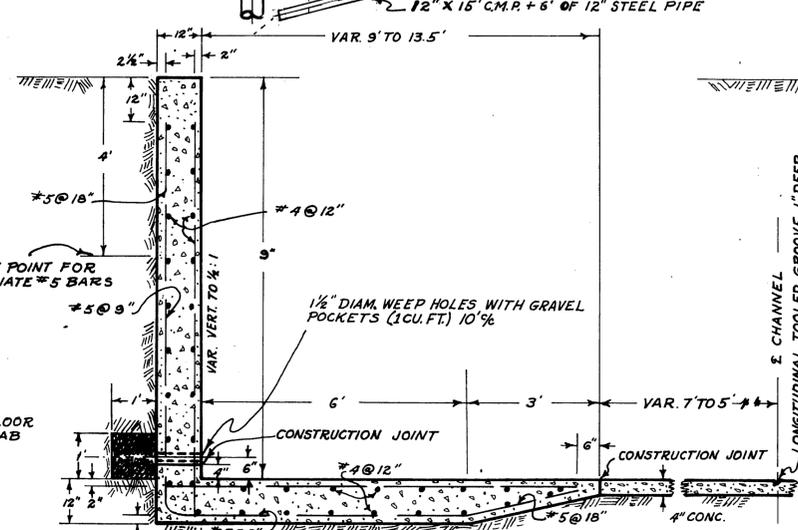
PLAN
SCALE
10' 5' 0' 10 FEET



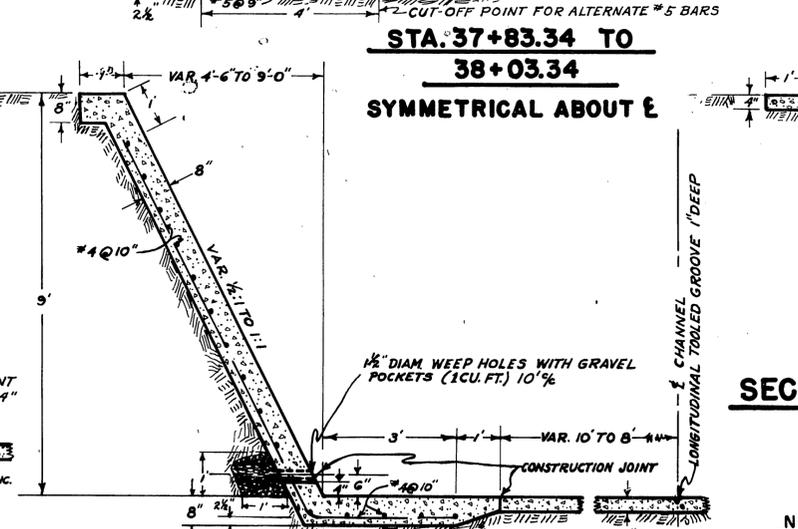
SECTION A-A
2" PAVED SECTION TO BE REMOVED



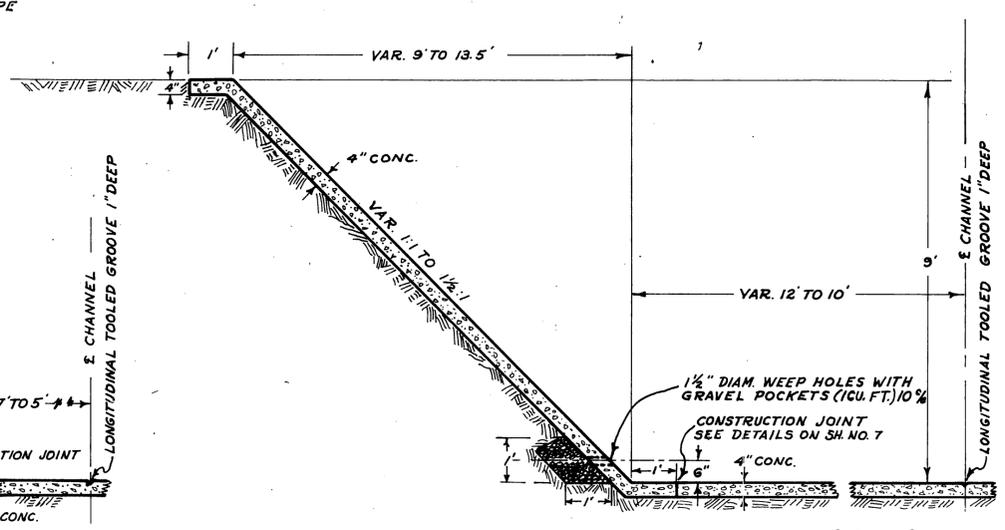
STA. 37+01.34 TO 37+11.34
TO REPLACE 2" PAVED SECTION See Sect. A-A



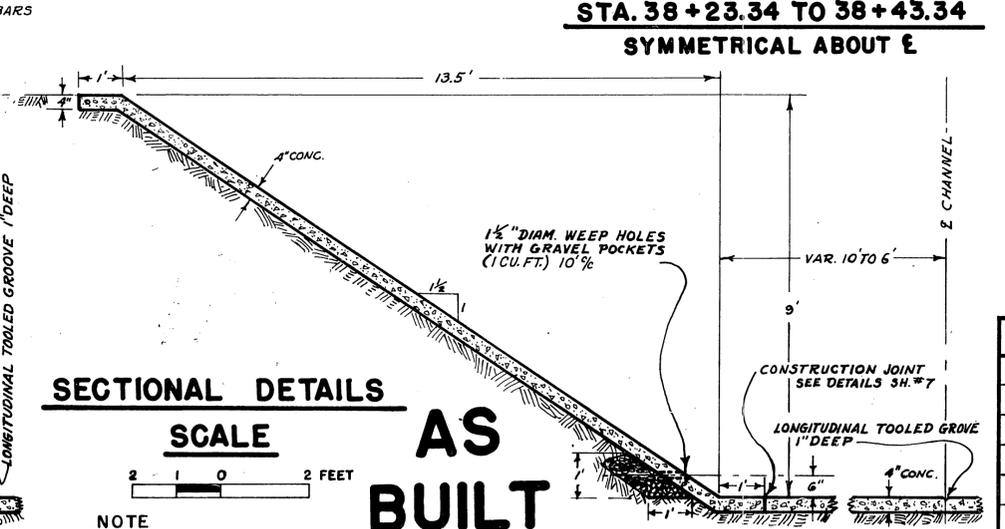
STA. 37+83.34 TO 38+03.34
SYMMETRICAL ABOUT E



STA. 38+03.34 TO 38+23.34
SYMMETRICAL ABOUT E



STA. 38+23.34 TO 38+43.34
SYMMETRICAL ABOUT E

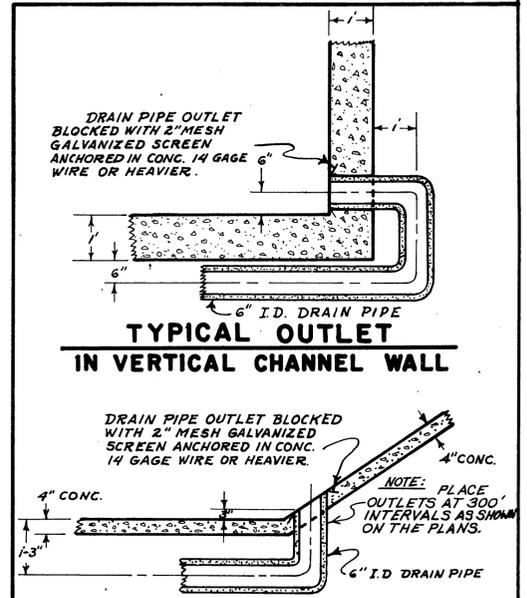


STA. 38+43.34 TO 39+43.34
SYMMETRICAL ABOUT E

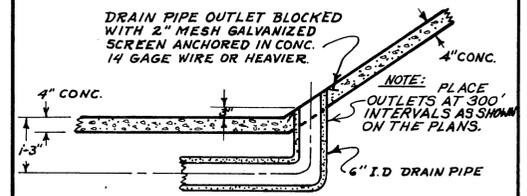
SECTIONAL DETAILS
SCALE
2 0 2 FEET

AS BUILT

NOTE
GENERAL NOTES SEE SHEET NO. 7
Date: R. DAVIS - NOV 1961



TYPICAL OUTLET IN VERTICAL CHANNEL WALL



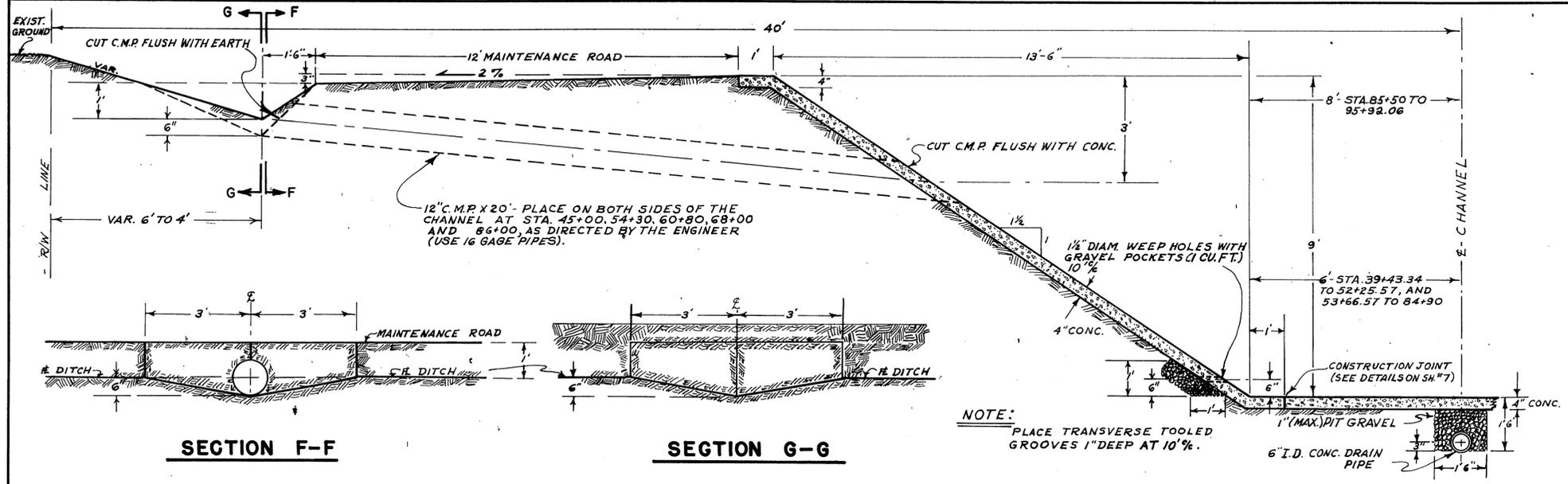
TYPICAL OUTLET IN SLOPED CHANNEL WALL

NOTE: PIT GRAVEL AT DRAIN PIPE TO BE PLACED TO CHANNEL WALL OUTLETS; GRAVEL NOT SHOWN FOR CLARITY.

SUB DRAIN - OUTLET DETAILS

SCALE
2 0 2 FEET

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
LA SIERRA STORM CHANNEL		
DETAILS AT PIERCE ST. CULVERT		
APPROVED: _____	DRAWN: R. DAVIS	SHEET NO. 6
DATE: _____	CHECKED: R. DAVIS	DATE DRAWN: APRIL 1961
PROJECT NO. 1-0-060 D-173 B		

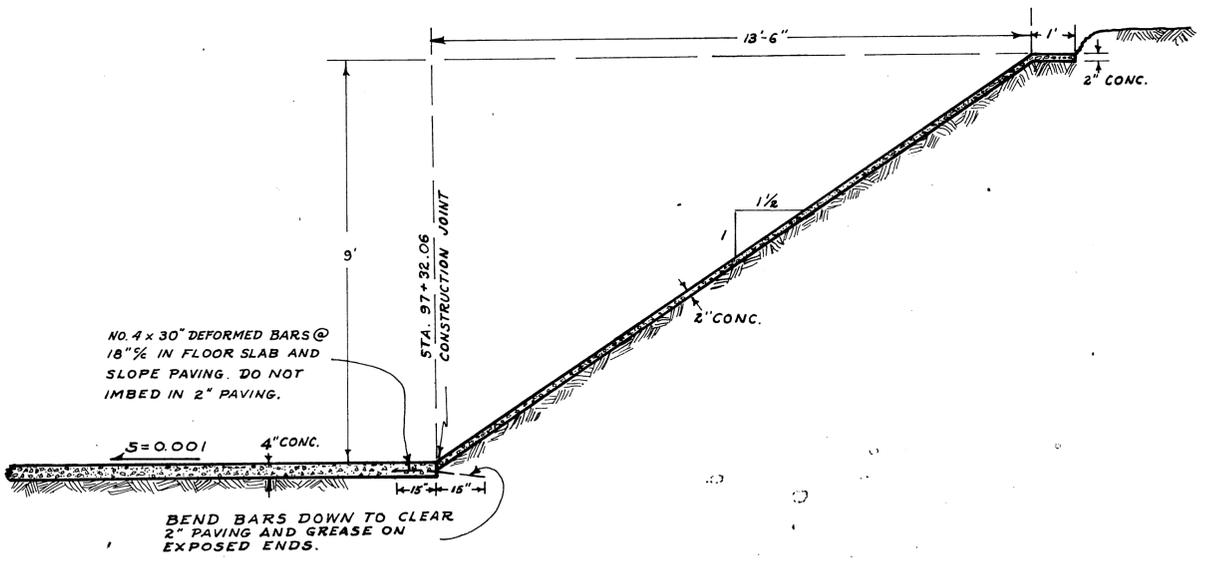


SECTION F-F

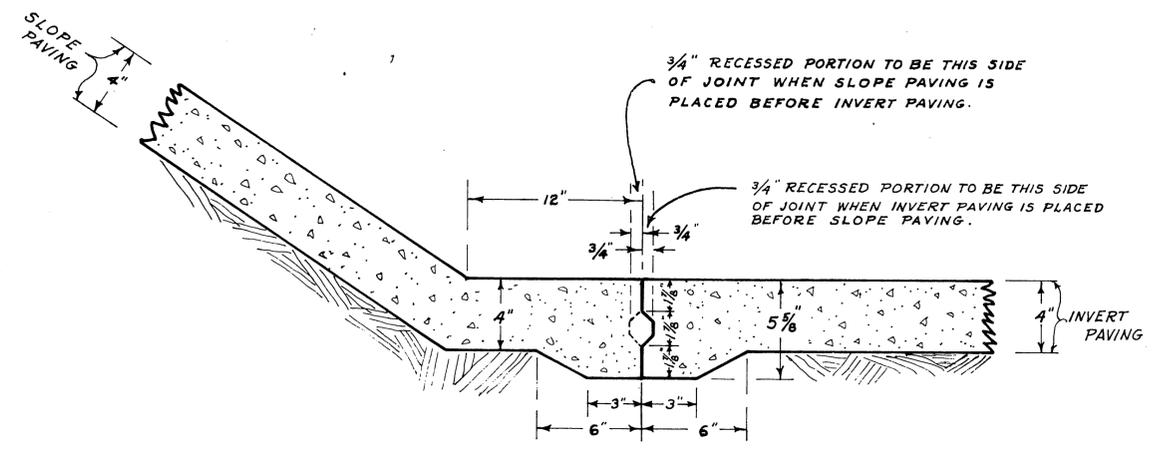
SECTION G-G

NOTE:
PLACE TRANSVERSE TOOLED GROOVES 1" DEEP AT 10' %.

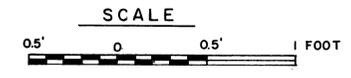
TYPICAL SECTION
SYMMETRICAL ABOUT ψ



SECTION B-B



ALTERNATE LONGITUDINAL CONSTRUCTION JOINT



SECTIONAL DETAILS



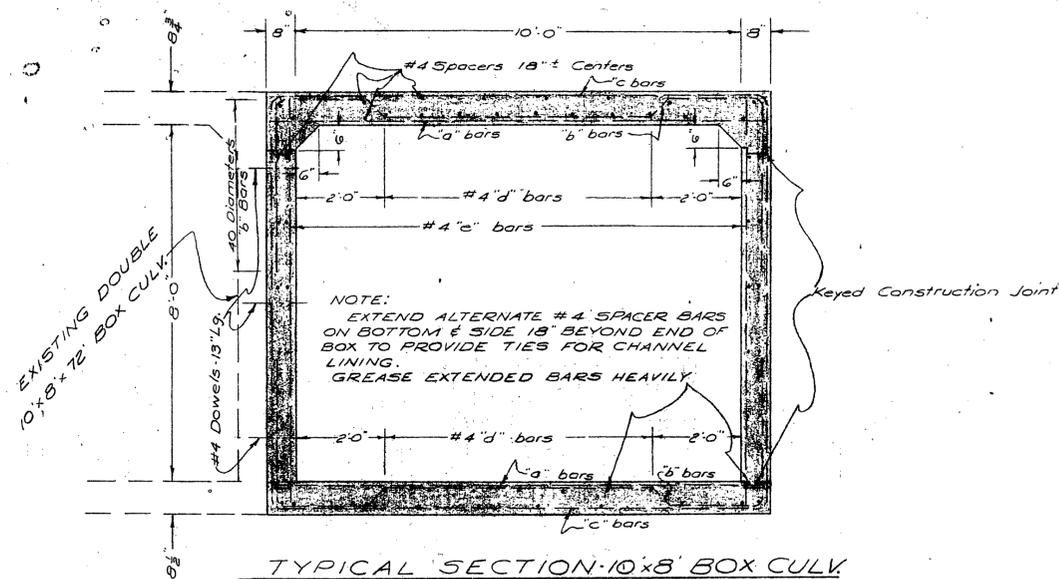
AS BUILT

Date: - Nov. 1961 - R. DAVIS

PROJECT NO. I-0-060

REVISED DATE	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
	LA SIERRA STORM CHANNEL		
	DETAILS		
APPROVED: <i>[Signature]</i>	DRAWN: R. DAVIS	TRACED: K. R. B.	SHEET No. 7
CHECKED: R. DAVIS	DATE: 5-1-61	DATE DRAWN: APRIL 1961	Doc. No. I-160

D-173 B



TYPICAL SECTION 10x8 BOX CULV

SCALE: 3/8" = 1'-0"

SINGLE 10x8 REINFORCED CONCRETE BOX			
CONCRETE	TOP SLAB THICKNESS		8 3/4"
	BOTTOM SLAB THICKNESS		8 1/2"
	SIDEWALLS THICKNESS		8"
REINFORCING STEEL	'a' BARS	SIZE BAR #	6
		SPACING	15"
		LENGTH	11'-1"
	'b' BARS	SIZE BAR #	6
		SPACING	15"
		LENGTH	16'-4"
	'c' BARS	SIZE BAR #	6
		SPACING	15"
		LENGTH	21'-3"
'd' DIST.	TOP SLAB NUMBER OF BARS		8
	BOTTOM SLAB NUMBER OF BARS		7
'e' BARS	SPACING		18"
SPACERS	NUMBER OF		44
	NO. 4 DOWELS 1'-11" LONG NUMBER OF		72

ESTIMATED QUANTITIES

1. REMOVE CONCRETE	12 CU. YDS.
2. STRUCTURE EXCAVATION	315 CU. YDS.
3. STRUCTURE BACKFILL	25 CU. YDS.
4. CLASS 'A' CONCRETE (STRUCTURE)	73 CU. YDS.
5. BAR REINFORCING STEEL	12,500 LBS.

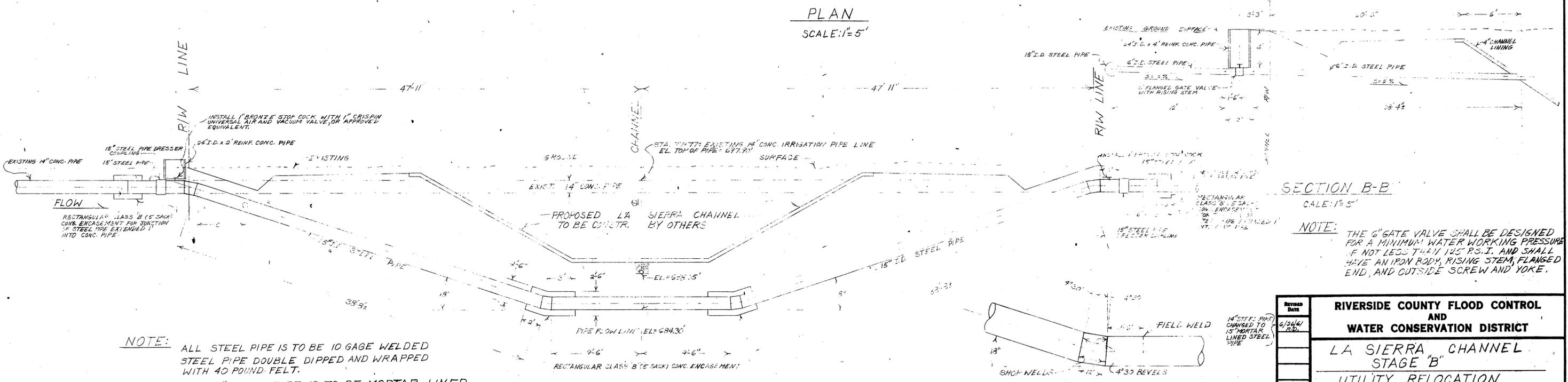
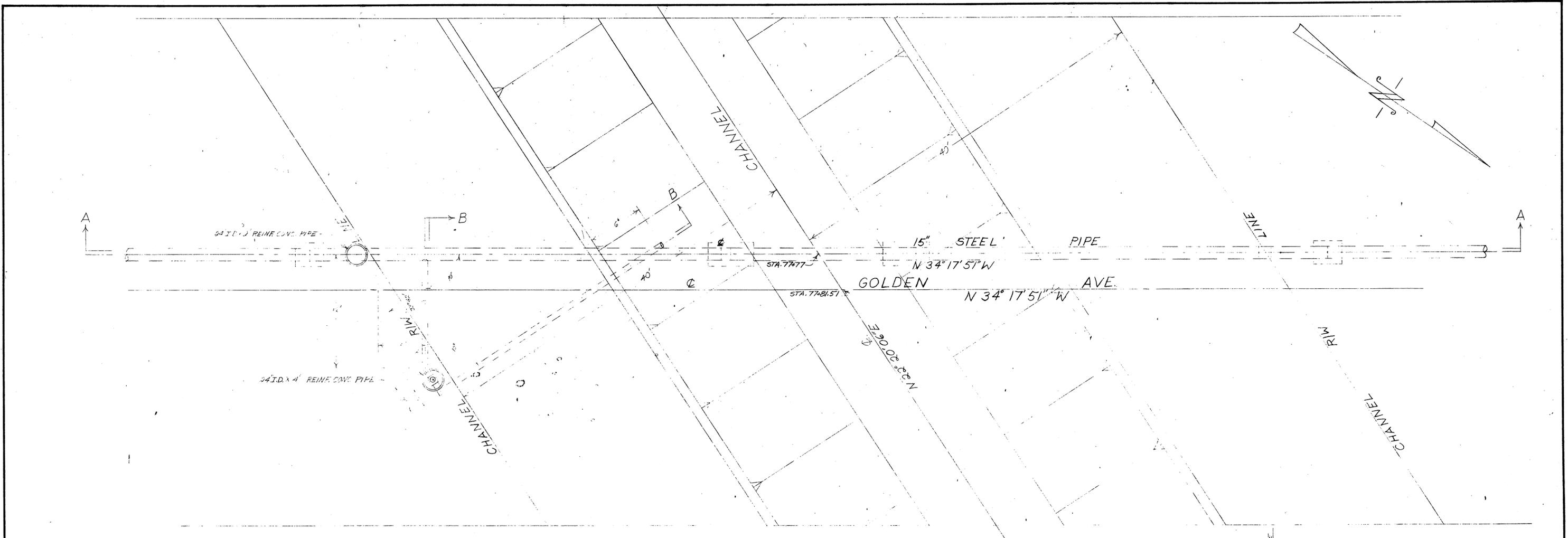
APPROVED: A.S. K. F. H. DATE: 5-8-61

RIVERSIDE CO. ROAD COMMISSIONER

REVISED DATE	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
	TYPICAL SECTION - SINGLE 10x8x72 BOX CULVERT TO BE ADDED TO DOUBLE 10x8x72 BOX CULVERT UNDER PIERCE ST. AT 37+43.34 LA SIERRA CHANNEL		
	APPROVED: <u>A.S. K. F. H.</u>	DRAWN: <u>E.K.S.</u>	SHEET NO. 9
	DATE: <u>5/8/61</u>	CHECKED: _____	DWG. NO. 1-160
		DATE DRAWN: <u>4-18-61</u>	

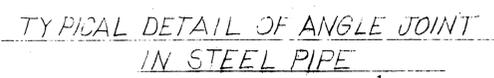
D-173 B

MISSING SHEET



NOTE: ALL STEEL PIPE IS TO BE 10 GAGE WELDED STEEL PIPE DOUBLE DIPPED AND WRAPPED WITH 40 POUND FELT. THE 15" STEEL PIPE IS TO BE MORTAR LINED, AND THE FINISHED I.D. IS TO BE 14" (MIN).

NOTE: THE 6" GATE VALVE SHALL BE DESIGNED FOR A MINIMUM WATER WORKING PRESSURE OF NOT LESS THAN 125 P.S.I. AND SHALL HAVE AN IRON BODY, RISING STEM, FLANGED END, AND OUTSIDE SCREW AND YOKE.



REVISED DATE	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
DATE	LA SIERRA CHANNEL STAGE "B" UTILITY RELOCATION AT GOLDEN AVE.		
APPROVED: <i>[Signature]</i>	DRAWN: R. DAVIS	CHECKED: <i>[Signature]</i>	SHEET NO. 11
DATE: JUNE 21, 1967	DATE DRAWN: JUNE 21, 1967	DATE: JUNE 21, 1967	SHEET NO. 1-160